Mr. Daniel Clemens
Wayne Metal Protection Company
1511 Wabash Avenue
Fort Wayne, Indiana 46803

Dear Mr. Clemens:

Re: Exempt Construction and Operation Status,
003-12661-00215

The application from Wayne Metal Protection Company received on August 28, 2000 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following equipment, to be located at 1511 Wabash Avenue, Fort Wayne, Indiana 46803, is classified as exempt from air pollution permit requirements:

(a) One (1) J-Mate J-120-G, 0.125 million British Thermal Units per hour (mmBtu/hr) natural gas-fired sludge dryer, with condenser, and water mist sprayer for PM control. This dryer is capable of drying 75 pounds of zinc sludge per hour.

The following conditions shall be applicable:

(1) Opacity Limitations [326 IAC 5-1-2]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuos opacity monitor in a six (6) hour period.

(2) Process Operations Particulate Matter Emission Limit [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the PM emissions from the sludge drying process shall be limited to 0.551 pounds per hour at process weight of 0.0375 tons per hour (75 lbs/hr).

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Management (OAM) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

APD

cc: File - Allen County
Allen County Health Department
Air Compliance - Jennifer Dorn
Permit Tracking - Janet Mobley
Technical Support and Modeling - Michele Boner
Compliance Data Section - Karen Nowak

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Wayne Metal Protection Company
Source Location:	1511 Wabash Avenue, Fort Wayne, Indiana 46803
County:	Allen
SIC Code:	3471
Exemption No.:	003-12661-00215
Permit Reviewer:	Aida De Guzman

The Office of Air Management (OAM) has reviewed an application from Wayne Metal Protection Company relating to the construction and operation of the following equipment:

(a) One (1) J-Mate J-120-G, 0.125 million British Thermal Units per hour (mmBtu/hr) natural gas-fired sludge dryer, with condenser, and water mist sprayer for PM control. This dryer is capable of drying 75 pounds of zinc sludge per hour.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Exemption No. 003-4176, issued on December 5, 1994; and

(b) Exemption No. 003-4050, issued on October 21, 1994.

This exemption approval does not include the above exemptions previously issued to the source, because incorporating all the exemptions will not change the exempted status of the source.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
D-002	Sludge Dryer	25	0.5	275	250

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on August 28, 2000.

Emission Calculations

(a) Sludge Dryer Combustion Emissions: See Page 1 of 1 TSD Appendix A for detailed calculations.

(b) Sludge Drying Emissions:

Operation	Emissions (pound/hr)	Emissions (tons/yr)
Sludge Drying	0.1	0.02

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	0.02
PM-10	0.02
SO_2	0.0
VOC	0.0
CO	0.0
NO_x	0.1

Justification of Approval Level

(a) Pursuant to 326 IAC 2-1.1-3, the proposed facility will be exempted from the registration and permitting requirements under Article 326 IAC 2, because the plantwide potential to emit are each below the level that requires a registration and permit.

Limited/Controlled Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Sludge Dryer Combustion	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Sludge Drying	0.02	0.02	0.0	0.0	0.0	0.0	0.0
Total Emissions	0.02	0.02	0.0	0.0	0.0	0.1	0.0

(a) This existing source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

County Attainment Status

The source is located in Allen County.

Pollutant	Status (attainment, maintenance attainment, or unclassifiable; severe, moderate, or marginal nonattainment)
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	not determined

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Allen County has been classified as attainment or unclassifiable for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Part 70 Permit Determination

(a) 326 IAC 2-7 (Part 70 Permit Program)
This existing source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:
(1) each criteria pollutant is less than 100 tons per year,
(2) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
(3) any combination of HAPs is less than 25 tons/year.

This is the third exemption air approval issued to this source. Combining all three exemptions will not change the exempted status of the source.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR art 63) applicable to this source.

State Rule Applicability - Entire Source

(a) 326 IAC 5-1 (Visible Emissions Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

(a) 326 IAC 6-3-2 (Process Operations)
The sludge drying has a process weight rate less than 0.05 tons per hour (100 lbs/hr). Therefore, the PM emissions is limited to 0.551 lbs/hr.

This operation is in compliance with the PM limit, since its PM emission is well below this limit.

Conclusion

The construction and operation of this sludge dryer shall be subject to the conditions of the attached Exemption **003-12661-00215.**

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Small Industrial Boiler

Company Nai Wayne Metal Protection Company
Address City 1511 Wabash Avenue, Fort Wayne, Indiana 46803
Exemption N 003-12661-00215
Reviewer: Aida De Guzman
Date Applicat August 28, 2000

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
0.125	1.1

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.0	0.0	0.0	0.1	0.0	0.0

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
above
emission